

# Ambrosia Beetles

## White frass on boles

**Name and Description**—*Trypodendron* sp., *Gnathotrichus* sp., *Xyleborus* sp. [Curculionidae: Scolytinae]  
*Platypus* sp. [Curculionidae: Platypodidae]

Ambrosia beetles attack stressed, dying, or dead trees. There are several species that belong to two different bark beetle families (figs. 1-2). Adult ambrosia beetles are generally small, reddish brown to nearly black, cylindrical beetles from about 1/8-3/16 inch (3-5 mm) long. Larvae are small, white, legless grubs similar to bark beetle larvae.

**Hosts**—Most western conifers

**Life Cycle**—There may be one or multiple generations per year. Ambrosia beetle adults attack spring through fall, depending on the species. Ambrosia beetles develop through four stages typical to bark beetles: egg, larva, pupa, and adult. For some species, all stages overwinter in the wood, and other species overwinter as adults in the duff and litter on the forest floor. Most species have a fairly wide host range.

**Damage**—Ambrosia beetles attack weakened, dying, and recently cut or killed trees. They can attack freshly cut lumber and lumber in decks before it is dried, and they can cause pinhole defects and dark staining in the outer wood. Galleries are formed in the sapwood or heartwood and damage the wood. Because ambrosia beetles tunnel into the wood, they are considered wood borers rather than bark beetles in this guide. Adults introduce ambrosia fungi that stain the wood, and lower its value. Ambrosia beetles feed on the fungus rather than the wood. The most obvious sign of an ambrosia beetle attack is the fine, white boring dust that accumulates at the base of the tree and in the bark crevices (fig. 3). Adults bore straight into the tree, creating perfectly round, small-diameter holes. If the bark is removed, the entrance points of adult ambrosia beetles and galleries are distinctive and are often surrounded by a dark brown or black fungal stain (fig. 4). Damage caused by ambrosia beetles can vary greatly among locales. In some areas, aggressive control programs are required to reduce economic damage to wood products.



Figure 1. Adult striped ambrosia beetle, *Trypodendron lineatum*. Photo: Maja Jurc, University of Ljubljana, Slovenia, Bugwood.org.



Figure 2. Adult Wilson's white-headed ambrosia beetle, *Platypus wilsoni*. Photo: Pest and Diseases Image Library, Australia, Bugwood.org.



Figure 3. Fine, white boring dust produced by ambrosia beetles. Photo: Ronald F. Billings, Texas Forest Service, Bugwood.org.



Figure 4. Entrance holes of adult ambrosia beetles. Photo: W.H. Bennett, USDA Forest Service, Bugwood.org.

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**Management**—Management is focused on preventing attacks because ambrosia beetles attack weakened or recently dead trees. Removing and processing wood quickly is the best way to prevent damage. Management can also be done through proper handling of wood products. Proper handling methods include: milling or debarking susceptible logs prior to the attack period, storing logs in an area safe from attack, and creating mill conditions unfavorable to beetle development.

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1. Furniss, R.L.; Carolin, V.M. 1977. Western forest insects. Misc. Publ. 1339. Washington, DC: U.S. Department of Agriculture, Forest Service. 654 p.